

## **STRATEGIC DECISION MAKING PARADIGMS:**

### **A PRIMER FOR SENIOR LEADERS<sup>1</sup>**

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The goal for the year at the United States Army War College (USAWC) is to prepare our students to be strategic leaders or to serve as effective advisers to the senior leadership of our military and this Nation. Accordingly, we help students gain an appreciation of the context and processes of strategic decision making. In the summer of 2005, then-Secretary of State Colin Powell, addressed the Distance Education class with his thoughts on Strategic Leadership. Referring to his time as the Chairman of the Joint Chiefs of Staff, Powell commented that, at the apex of the organization, strategic leaders are concerned not only about internal workings of their organizations, but also about external aspects. In addition to making and influencing decisions internal to the Armed Forces, he also emphasized two external factors—assessing and mitigating risk as well as scanning the environment for windows of opportunity to influence decisions at the policy level.

Powell's comments suggest there are two aspects of decisions at the strategic level of which leaders should be aware. First, there are the decisions made as senior representatives of their organizations. It is therefore important to have models and frameworks that inform how strategic leaders make or should make decisions which directly affect their organizations. These are the internal aspects of strategic decision making. Second, strategic leaders also serve in a milieu that is beyond their authority for making decisions. Leaders must have some sense of how external decisions are made and, importantly, understand the roles they can play in influencing those decisions. Decision-making frameworks for policy levels are important for strategic leaders to appreciate how they can best influence decisions in their external environment. This article's purpose is to present some models or frameworks for understanding how strategic leaders can make decisions as well as recognizing how to influence decisions that affect their organizations or institutions. The following models presented in this article are drawn from the social psychology, organizational behavior, sociology, and public administration literature.

### **STRATEGIC DECISION MAKING**

Strategic decisions are non-routine and involve both the art of leadership and the science of management. Routine decisions of how to efficiently manage resources according to established procedures and clearly understood objectives is the technical work of management. Routine decisions are normally the purview of supervisors and middle-level managers that have the requisite authority and responsibility to take action.

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<sup>1</sup> This is a revision of a chapter by Prof Charles Allen and Dr. Breena Coates in Stephen J. Gerras (ed.), *Strategic Leadership Primer* (Carlisle, PA: U.S. Army War College, 2010).

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However, non-routine decisions require what Harvard Professor Ron Heifetz referred to as “adaptive work” where senior leadership must consider the broader implications of the situation, take an active role in defining the problem, creatively explore potential solutions, and apply judgments as to what *should* be done.<sup>1</sup> The USAWC defines Strategic Leadership as the process of influence for “achievement of a desirable and clearly understood vision by influencing the organizational culture, allocating resources, directing through policy and directive, and building consensus.”<sup>2</sup> This implicitly requires the capacity for strategic decision making, which is necessarily supported by strategic thinking.

This paper offers commonly used decision paradigms while highlighting their particular strengths and weaknesses. Making sense of strategic decisions requires adding a set of mental models distinct from the traditional military decision making models. The decision theories presented provide leaders with an understanding of the major forms of decision-making used in complex environments. These models are more than abstract conceptualizations; they provide frameworks by which to analyze past strategic practices and develop new ones. The models are categorized generally as either prescriptive or descriptive. As the term implies, the prescriptive model suggests methods and processes that should be used in order to make better decisions. Leaders (e.g., in the Military Decision Making Process (MDMP)) see this type of model as a matter of choice. In contrast, descriptive models attempt to detail the process of how decisions are actually made in context.

## THE BASIC DECISION MAKING PARADIGMS

There are many models of decision making useful for strategists to examine. Some of the most well known are offered for consideration to USAWC students are:

1. Rational Model;
2. Bounded-Rationality Model;
3. Bargaining Model;
4. Participative Model;
5. Incremental Model;
6. Punctuated-Equilibrium Theory;
7. Polis Model;
8. Garbage Can Model (Multiple or Three Streams Model).

Three of the models are prescriptive in that each offers an approach that decision makers may choose to pursue with specific objectives in mind. The remaining five models are explanatory and descriptive of how decisions actually occur, often in contradiction to the intent of decision makers.

**Rational Decision Making:** This prescriptive approach, also known as “the rational-comprehensive” model, borrows from economic theory and has the goal of maximizing efficiency by picking the best alternative based on specific criteria. Congruent with the MDMP, it is often described as a six-step process:

1. Define goals.
2. Identify alternatives.
3. Calculate the consequences.
4. Decide the most favorable using a calculated ratio of benefits to costs.
5. Monitor implementation.
6. Begin again.

The rational approach is very attractive and easy to embrace with its simplicity. The formulation intuitively seems to make sense. It provides a structured way to address a problem and arrive at a solution. The approach may appear to impose certainty and clarity. However, it is best suited for simple, well-structured problems and generally predictable environments. The rational decision making process depends on clear statements of goals accepted by those seeking to address problematic conditions. It works well on technical issues when goals are precisely defined and there is general agreement on measures for analysis and selection criteria. NASA uses the rational approach because engineering parameters and procedures tend to be less ambiguous. The use of this approach is much more difficult and problematic for defense organizations whose goals are constantly a matter of debate in a political system designed to balance federal power between three branches of government.

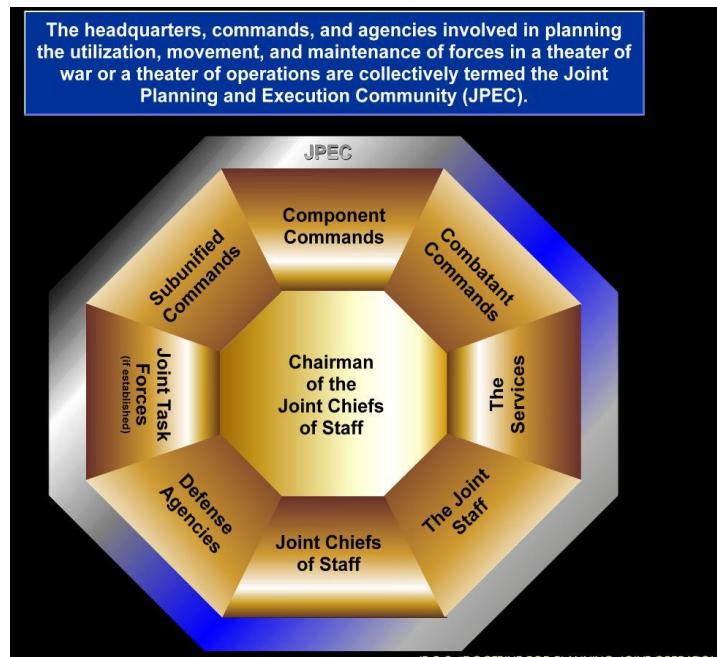


Figure 1. The Joint Planning and Execution Community<sup>3</sup>

Although the rational approach of the MDMP is embraced by our military culture, many factors prevent its strict adherence as a prescriptive process. We see the challenge presented by the rational approach when our military leaders seek clear expressions of desired end-states as a precursor to developing military strategy and operational plans (e.g., Weinberg-Powell doctrine as implemented in Operations Desert Shield and Desert Storm). Using the context of the Joint Planning and Execution

Community shown in Figure 1, it is arguably difficult to have each sub-community agree on the common goals to be achieved. The nature of the problems and the complexity of the environment would generate an unmanageable number of possible alternatives to consider. The uncertainty and ambiguity of the environment would also undermine any confidence in determining consequences if a particular alternative were selected. Those consequences, either in the attainment of stated goals or commensurate benefits and costs, assume causality between selected courses of actions and subsequent results. While military leaders prefer clear expressions of end states and objectives, ambiguity is valuable in a political environment. The desire for clearly delineated goals and objectives are rarely to be found and even when they are stated publicly, they are often subject to change. Hence, the rational decision making approach is not sufficient to explain the real-world decisions made at the operational and strategic level.

***The Behavioral Model (Bounded Rationality):*** The most important critique of the rational approach comes from the work of Nobel Laureate, Herbert Simon, who presented the concept of “bounded rationality.”<sup>4</sup> This descriptive theory holds that:

1. Humans are ill-equipped intellectually to make cognitively rational decisions because they can only process a few bits of data at a time.
2. Comprehensive analysis is impossible due to limitations on the availability of information, time, and expertise.
3. Individuals cannot imagine every possible solution to a problem, and therefore not all possible alternatives are considered or analyzed.

The practical application of the rational MDMP has decision makers simplifying the problem set and restricting themselves to a few major alternatives. This happens in the face of time constraints and the limitations of people. In practice, decision makers identify a limited number of decision-making criteria and subsequently examine a limited range of alternatives that have worked before or are easy to develop. The selection of alternatives tends to stop at the first alternative that sufficiently addresses the problem at hand. Given the lack of perfect information to make the decision and the impossibility of optimization in the problem setting, Simon argued that decision makers “satisfice.” That is to say that people do not optimize decisions, but actually seek to find a solution that is simply sufficient and satisfactory—one that is “good enough” to meet minimum established criteria. The conclusion of Operation Desert Shield in 1991 short of an invasion of Iraq and the overthrow of Saddam Hussein’s regime could be viewed as a satisficed decision that was good enough at the time. A contemporary example during the Global War on Terrorism was the shift of military effort in Afghanistan to support Operation Iraqi Freedom. A case could be made that the objectives to eradicate Taliban camps and deny safe havens were sufficiently achieved in Afghanistan and thus provided the opportunity to conduct regime change in Iraq.

This approach often has an implicit choice variant where, although multiple alternatives are presented, there is a clear favorite that will likely be selected with decision criteria skewed to support the choice. Military planners and operators who have been involved with MDMP can recount the development of the obligatory three

courses of action and the “objective weighting” that resulted in selection of the staff favorite course of action (and the one that the commander would approve).

**Bargaining Model:** Bargaining reflects a decision making process both between individuals within an organization and between organizations through their representatives. This perspective requires an understanding of the principles of negotiation. Senior leaders may choose this approach in which the essence of decision making of groups involves tradeoffs between constituents that may have competing interests and agendas. In seeking to identify common interests and mutual benefit for the involved parties, some concessions may be made, but the resulting decision should produce a condition that is acceptable to either side. Here the anchoring and adjustment bias inhibits substantial movement from the status quo so it is unlikely to have drastic change in policy or strategy embraced by the group.

The bargaining approach is common in government, but does have a number of advantages and weaknesses.<sup>5</sup> It may be effective for addressing and presenting issues while serving as the catalyst for getting multiple perspectives before the decision making body. However, this approach may not result in the best alternative for a given situation since political consensus sometimes results in the lowest common denominator—achieving a decision that all will accept. Consequently, it may lead to an equitable distribution of power and benefit that may be inherently less effective than a contested decision.

Kettl and Fesler provide us with an example as they deconstruct the U.S. decisions during the Cuban Missile Crisis.<sup>6</sup> Based on Graham Allison’s classic study, *The Essence of Decision*, the example demonstrates the bargaining among the key Kennedy Administration advisers ranging from the senior military officials, Secretary of Defense, Secretary of State, Director, Central Intelligence Agency and others under the leadership of the Attorney General, Robert Kennedy.<sup>7</sup> The Cuban Missile Crisis was a high-stakes and time-sensitive event with potentially catastrophic consequences for failure. The key players within the Kennedy administration had distinctly opposing views on the goals to be achieved and what should be done (e.g., General LeMay’s insistence on confronting the Soviet Union with direct military strikes) in an environment of uncertainty, complexity, and ambiguity. The final U.S. actions were derived from reaching consensus through several iterations of discussions with the advisers.

Bargaining is a process that gives each participant a voice in the proceedings. While it may not be the case where a simple majority wins, it can be fraught with contention and can be time-consuming in the attempt to resolve points of disagreement. In this form of decision making, the needs of the most powerful parties are more likely to be met, but the larger interests of the aggregate may not be addressed. Limiting the number of people involved in making decisions presents its own paradoxes. Smaller numbers of participants may be able to reach decisions more quickly by excluding less powerful members, but may not have the requisite diversity of thought and experience to formulate better decisions. The potential for better decisions increases when the participant pool is larger even though achieving agreement may be more difficult.

**Participative Decision Making Model:** The participative decision making perspective is an expansion of the bargaining approach and provides a choice to include all those directly affected by the decision. As a prescriptive model, it is the most democratic form of decision making where there is an opportunity to provide input and influence. However, there is an important distinction between “consultation” and “shared decision making power.”<sup>8</sup> Providing the opportunity to voice an opinion is not the same as giving power to make the decision. We commonly see this approach as one that calls for “consultation and stakeholder analysis” and that places emphasis on meeting with “constituents and clientele” to discern the key issues for consideration before decisions are reached. While these efforts may be largely symbolic, such stakeholder groups can wield significant power and present obstacles if not appropriately included in the decision process. These groups may have their own agenda and interests to protect, hence raising concerns about the degree to which they truly represent the goodwill of the greater community. To address this concern, advisory groups are often sought to represent all views of the community in a grass roots fashion.<sup>9</sup> Participative decision making takes place in the United Nations, NATO, and other world bodies.

An example of participative decision making, the 2005 Base Realignment and Closure (BRAC) process had obvious implications for the members of the Joint Planning and Execution Community. Decisions made by the Services responsible to provide the Title 10 functions of training and sustaining fielded forces have a significant impact on the Combatant Commands (CoComs) that have the mission to execute the national military strategy, joint plans, and operations. The BRAC decisions recommended by the Army in such areas as realignment of operational forces of the Active Army at installations DOD-wide, return of overseas units back to the continental U.S., and consolidation of headquarters and other activities in Joint or multifunctional installations have obvious implications for war-fighting commands.<sup>10</sup> To gain input from the military departments on areas of common interest, Joint Cross Service Groups were formed and provided input to the Army infrastructure analysis for the BRAC deliberations. Once the DOD BRAC report was submitted to the executive branch, members of the Presidential BRAC commission visited installations recommended for closure to hear from those impacted by such decisions.

Participative decision making is potentially slow and expensive. While it is an effective means to collect information, the amount and unorganized nature of the information is a problem in its own right that has to be addressed. The quality of the decision in this approach often depends on the expertise, and commitment of the participants. There are a number of important factors that influence the quality of participative decision making. The participants should strive to subordinate self-interest in pursuit of common goals. There should be an appropriate level of representation from the stakeholders and those groups should have enough power to influence the outcome.<sup>11</sup>

**Incremental Model:** Charles Lindblom also rejected the rational-comprehensive model and presented an alternative “incremental” approach to describe decision making in the

public policy arena. In his now famous paper, “The Science of Muddling Through,” Lindblom saw that most policy decisions made involve small analytical increments in response to events and circumstances where decision-makers’ analysis focuses on familiar, better-known experiences.<sup>12</sup> This approach significantly reduces the number of decision factors and alternatives available. “Disjointed” incrementalism, argued Lindblom, is really how problems are solved over time, in piecemeal, rather than comprehensive fashion. Relatively small or incremental policy changes tend to be the norm because of the need for consensus among the interested parties such that negotiation efforts are directed to what can be achieved. Unfortunately, the attainment of short-term solutions may be at the expense of more important and far-reaching goals. Incrementalism is not inherently undesirable since small changes from the resulting decisions are more readily subject to correction if they produce unfavorable outcomes. The theory of incrementalism explains how the process of decision-making is slowed down and organizations avoid making big mistakes that could be costly—militarily, financially, and politically. The focus, however, on smaller problems and failure to confront the larger issues may result in “kicking the can down the road” to deal with later when the situation may be more complex and dangerous. Furthermore, the incremental model may slowly move the organization away from its espoused goals. If the organization is faced with an environment that has changed significantly, the incremental approach is unlikely to result in the necessary amount of change to guarantee organizational survival.<sup>13</sup>

The incremental model has the following characteristics:

1. Only a few options and means are considered;
2. Decisions are the product of negotiated settlements;
3. Changes are made gradually over time;
4. Decisions tend to be made reactively;
5. Political considerations are important in determining outcomes.

The incremental approach to decision making is reflective of the Planning, Programming, Budgeting, and Executing (PPBE) process used in the U.S. Department of Defense. The greatest predetermining factor for any year’s budget is the prior year’s budget. Anything more than incremental change is unlikely when it comes to the budgetary process. An item might be submitted and approved in the Program Objective Memorandum (POM) and incrementally added to by using the Supplemental Budget to gain more resources for it. Alternatively, a program might be incrementally developed in the POM over several years. Several of DoD weapons systems programs (e.g., Bradley Fighting Vehicle System, the Remotely Piloted Vehicle, and the Joint Strike Fighter) could be viewed using the incremental model. In the case of the Bradley Fighting Vehicle, the originally espoused goals were incrementally contradicted over time.<sup>14</sup>

Lindblom conceded shortcomings of the incremental approach. They included the fragmentation of decisions, use of arbitrary exclusions, and decision-makers overlooking better policies not suggested by the chain of successive policy steps. Yeheskel Dror offered other critiques of incrementalism: It may not suffice to meet real

growing demands; it may miss the mark entirely; it lacks responsiveness to large-scale needs; it makes acceptable the forces that tend toward inertia; it maintains the status quo, and, it lacks innovativeness.<sup>15</sup>

Experts analyzing policy change acknowledge that Lindblom's incrementalist approach is insufficient to explain all policy decisions. The description does not account for abrupt or atypical changes witnessed in the history of public policy decisions. Viewing policy change using just two dimensions—the mode and speed of change, one can easily see that Lindblom's approach only accounts for policy in limited conditions. (See Figure 2-Four conditions of policy change.) The *mode of change* categorizes policy shifts as either *fundamental (equivalent to radical or revolutionary)* or *incremental* while the *speed of change* describes it as either *gradual* or *rapid*.<sup>16</sup> Lindblom's model accounts for the *incremental and gradual* change (condition A and possibly B) but does not explain conditions of *fundamental* change (conditions C and D) which is the focus of the following discussion.

		Mode of Change	
		Incremental	Fundamental
Speed of Change	Gradual	A	C
	Rapid	B	D

Figure 2. Four conditions of policy change

The speed of change may occur due to sudden, unexpected perturbations in the environment such as; changes in the way a problem is framed and perceived, or the attention a particular issue receives in the public's eye. Policy reactions to severe events may drive policy that precipitates fundamental, revolutionary change rather than the incremental, evolutionary change presented in Lindblom's approach. These fundamental changes may occur rapidly or may occur along a more gradual, programmed path. Regardless, fundamental change represents a radically different way of achieving a policy end and marks a drastic shift in the way things are done from the way they were done.

**Punctuated Equilibrium Theory:** In an effort to describe fundamental policy changes and revolutionary decisions, Baumgartner and Jones introduced Punctuated Equilibrium Theory.<sup>17</sup> Adapting the theory of biologists Eldredge and Gould, they applied the principles to public policy to explain the drastic, non-incremental changes that took place in the development and enactment of policy.<sup>18</sup> Baumgartner and Jones' longitudinal analysis of policymaking outcomes on a variety of issues led to three major conclusions. First, "policymaking both makes leaps and undergoes periods of near stasis as issues emerge and recede from the public agenda." Second, "this tendency toward punctuated equilibria is exacerbated by American political institutions." Finally, "policy images play a critical role in expanding issues beyond the control of the specialists and special interests that occupy what they termed 'policy monopolies'."<sup>19</sup>

Punctuated equilibrium theory (PET), appropriately applied to public policy and the public organizations and institutions that enact them, posits that two main factors drive decisions in a manner that punctuates stasis and subsequently cause significant

changes in policy decisions. Further, these sustained changes occur in spite of substantial forces that tend to reinforce policy stasis (the status quo): culture, routine, bureaucracy, predictability, and bounded rationality. Baumgartner and Jones attributed the causes of drastic change to: 1) the shifting nature of how issues become defined or framed; and 2) key actors emerging who set the agenda and influence what is and is not to be decided. For example, various constituents may frame the issue in public debates to create urgency and the need for drastic policy changes. Key actors, predominantly political leaders in this case, become critical change agents in influencing, steering, or setting the agenda. They often define which issues become the most important ones considered and debated in the policy arena.

Punctuated Equilibrium Theory is useful in examining the process which begat the Goldwater-Nichols Act of 1986. In the 1980's, Secretary of Defense Caspar Weinberger and Congress pressed for the U.S. Armed Forces to operate as a joint force and to be more efficient in their use of national resources. The Armed Services, however, continued to emphasize independence and Service senior leaders predominated in deciding force capabilities and their employment to secure national interests. Each Service Chief, often in contention with Combatant Commanders, played the larger role with Title 10 authorities to man, organize, train, and equip forces of the respective Services. Each Service secretary, rather than the Defense Secretary, exercised the preponderance of civilian control over their military departments. Beginning with then-Chairman of the Joint Chiefs of Staff General David Jones, the debate for change began. Despite the support of the Army Chief of Staff General Edward C. Meyer and Congressman Ike Skelton, a future Chairman of the House Armed Services Committee, there was insufficient power to change the status quo.

Staunchest defenders of the status quo were Senators John Tower and John Warner, the other Service chiefs, and the Secretary of the Navy, John Lehman. Senator Tower played a particularly critical role as the Chairman of the Senate Armed Services Committee. Secretary of Defense Casper Weinberger and President Ronald Reagan provided additional support to preserve the status quo and resist change efforts. With the tragic loss of U.S. Marines with the Beirut bombing in 1983 followed closely by the coordination fiasco in executing Operation Urgent Fury in Grenada, public attention to the problem increased dramatically.<sup>20</sup> These two events pointed to more severe issues than inefficient expenditure of government resources.

When Senator Tower retired in January 1985 and Senator Barry Goldwater became the Chairman of the Senate Armed Services Committee, conditions shifted sufficiently to "punctuate" the equilibrium. The two conditions, how the issue was defined and changes in key actors, presented the opportunity for the Goldwater-Nichols Act to be placed on the agenda with sufficient policy leadership to support its passage.<sup>21</sup> In essence, key stakeholders in Congress made it a priority issue and in turn redefined the issue as one of the protection of U.S. service members' lives over desires for Service autonomy. Finally, after years of deliberation, the landmark bill was signed into law on 1 October 1986. With congressional legislation, fundamental change was the *new* status quo.

**Polis Model:** Deborah Stone is another scholar critical of the rational and the incremental models. She offered an alternate perspective of public policy making—the Polis model of a political community.<sup>22</sup> Stone presented opposing viewpoints of the *market* (a rational model for political decision-making) and the *polis* (how political decisions really happen). She argued the polis perspective is more descriptive of the way decisions are really made by comparing the theoretical political environments of the market and the polis and considering the goals of the respective communities. How problems are defined in the market versus the polis is a function of symbolism, causes, and interests that influence how problems are addressed. Decisions are made and solutions (policy-strategies) are formed with inducements, rules, rights, and powers as the driving forces. In sum, the polis model assumes inconsistencies in life where the political community is able to deal with less-than-comprehensive information and less-than-reliable information. Stone's model uses the following imperatives:<sup>23</sup>

1. State goals ambiguously and keep some secret.
2. Shift and redefine goals as the political situation dictates.
3. Keep undesirable alternatives off the agenda by not mentioning them.
4. Make your preferred alternative appear to be the only feasible one.
5. Focus on one part of the causal chain and ignore politically difficult ones.
6. Use rhetorical devices to blend alternatives to prevent strong opposition.
7. Selectively project consequences that make your decision look the best.
8. Choose the action that hurts powerful constituents the least, but portray your decision as creating the maximum social good.

The Polis Model can be applied to the decision making process of President Lyndon Johnson for the Vietnam War. As H.R. McMaster recounts in his book, *Dereliction of Duty*, Johnson's goals for the conflict were not clearly stated nor shared with the U.S. Congress.<sup>24</sup> With support of Secretary of Defense McNamara, the president co-opted the Joints Chiefs of Staff to gain their silence as he pushed for his Great Society agenda at the expense of recommended force levels for operations in Vietnam.

**Garbage Can Model:** March, Cohen, and Olsen developed the notion that decisions are made based on chance, unsystematic interactions of actors and opportunities, and the current availability of resources.<sup>25</sup> This model, based on the theory of organizational anarchy, posits the notion that organizations: have inconsistent and ill-defined preferences, and operate on a basis of trial and error; include stakeholders who only partially understand the organization's processes; and have decision-makers who often act whimsically and impulsively. Within this framework, March and his colleagues theorized that organizations produce many solutions for which there are no immediate problems. These decision are kept handy or are “dumped in a holding can—the garbage can” for future use. Stakeholders in the policy arena keep “solutions” handy under the assumption that problems requiring solutions will arise in the future and a search through the “garbage” will yield a match with one of the pre-conceived solutions. In this sense, the garbage can is really an “opportunity” can. The mix of opportunities lying in waiting are based on the organization's current and past environmental realities. The garbage can's relevance depends on how quickly the can is filled and how quickly

the garbage can is discarded. While the garbage can presents opportunities for addressing the important problems, it has the threat of unsystematic rationality.

Vice Admiral Joseph Metcalf used the garbage can model as a way of explaining decision making with respect to the 1983 Grenada Rescue Operation.<sup>26</sup> VADM Metcalf, the commander of the joint U.S. forces, CJTF 120, for Operation Urgent Fury, reflecting on how decisions were made, said, "It is clear that many decisions just 'happened'."<sup>27</sup> While the goals of the invasion were clearly established and communicated, the command and staff structure was not. The command, cobbled together with available forces from all services, represented an existing solution used to solve an emergent problem. Decision-makers modified the existing CJTF 120 organization, which existed on paper only, by re-directing personnel—probably the most notable case being the reassignment of the Army liaison officer, Major General Norman Schwarzkopf, and naming him deputy commander.

While the operation was a success, several problems with intelligence, communications, and coordination (resulting in fratricide) among the joint forces became painfully evident and led to congressional investigations. The review of Operation Urgent Fury contributed to the enactment of the Goldwater-Nichols Department of Defense Reorganization Act of 1986 (GNA). GNA established authorities for the Chairman of the Joint Chiefs of Staff, revised military command structures, and instituted requirements for joint training. In sum, the non-rationality of the decision making process led to legislation to provide more structure and control.

While many scholars accept the Garbage Can Model as a viable description of decision-making, others find it inadequate as a theoretical framework to explain why some policy decisions occur and others do not. The model does not lend itself to predicting outcomes in the decision making process. Using the Garbage Can Model as a starting point, John Kingdon developed an adaptation called the Multiple or Three-Streams approach to account for how decisions happen at the national policy level. He posited that three streams run in parallel to each other in the policy arena. The first stream he called the **problem** stream. The problem stream represents all of the issues or problems that exist in the public's eye that warrant solutions. The second stream, the **policy** stream, represents all of the actors (agencies, organizations, and interest groups) interested in solving these problems and the policy solutions they offer. The final stream is the **political** stream. This stream embodies the group of politicians that represent the key decision makers or influencers who are capable of driving the policy to a decision.

When the three streams—problem, policy, and political—cross, there is the unique window of opportunity to effect major policy decisions. These policy windows exist when: problems of severity and importance emerge (often presented as crises); *preferable* solutions to the problems surface; and agents in the political stream occupy positions of power can set the agenda and influence choices. Until that nexus is realized, some problems remain unresolved. Kingdon's approach, like others, focuses on the agenda-setting phase of policymaking but also explains how decision makers

consider and choose policy alternatives. His framework is particularly well suited to account for policy development. It uses a systems approach—where inputs become outputs through a transformative process and feedback loops provide for learning or self-correction. It considers and explains how decisions occur in ambiguous conditions. Finally, it considers time as a resource and provides a temporal context or explanation for why some decisions emerge and others do not.<sup>28</sup> Policy windows do not remain open forever. They are limited in time. To be decisive, politicians must recognize the opportunity to act and then rally public interest and requisite resources behind a specific policy solution. Otherwise, windows close and the status quo prevails.

Although Kettl used Punctuated Equilibrium Theory as a way to understand and explain the decision for creating the Department of Homeland Security, one might also use Kingdon's approach to explain the same event.<sup>29</sup> On 2 February 2001, CNN reported an official statement from the U.S. State Department:

U.S. officials believe they have established a plausible link between terrorist cells operating in Jordan and Montreal and Osama bin Laden's al-Qaeda network. Last week British police made a number of arrests, including that of Mustafa Labsi, an Algerian national associated with an Algerian militant group believed to have participated in a plot to attack the United States in December 1999.<sup>30</sup>

In the aftermath of terrorist attacks dating back to the 1993 bombing of the World Trade Center and with reports of terrorist threats to the homeland increasing in frequency, the problem of how to protect the U.S. from such attacks became clear. In the face of the findings of the 2001 U.S. Commission on National Security in the 21<sup>st</sup> Century (known as the Hart-Rudman Commission) Phase III Report and ensuing legislative proposals by Representative Mac Thornberry from Texas, no decisions were made to address the persistent threat of attack. Thornberry's bill, proposed in the spring of 2001 in response to the Hart-Rudman report, recommended combining the Federal Emergency Management Agency (FEMA), Customs, the Border Patrol, and other organizations to form an organization he named the National Homeland Security Agency. Despite Congressional hearings on the matter, no action was taken. However, within eleven days of the terrorist attacks on 11 September 2001, President Bush announced the creation of the Department of Homeland Security and issued Executive Order 13228 formally establishing the department on 8 October 2001.<sup>31</sup>

## **CONCLUSION**

Each decision paradigm presented in this paper provides a method to analyze (or simply understand) decision processes that our USAWC graduates may engage in as they move into higher levels of service. It is evident that each paradigm has its opportunities and challenges as well as its strengths and weaknesses in their ability to appropriately capture or describe the decision-making dynamics. Their advantages and disadvantages will manifest themselves in varying degrees and in different contexts.

While the prescriptive models offer choice to senior leaders of how to proceed to address problems and seek solutions, the descriptive models may be more informative to understand decisions as they unfold.

As they sit at decision-making tables, our graduates need to be able to recognize and analyze the processes used in strategy planning. They also need to know that while we aspire to be rational in our choices of action, we are limited in our cognitive ability to comprehensively develop and assess alternatives. Additionally, we have innate biases and use heuristics that effect how we process and use information. Since implementing decisions generally requires the involvement of others, it is necessary to include them in the process of identifying key issues and determining potential solutions.

The environment and context of the problem should influence the extent of inclusion and collaboration. In such cases, either the bargaining or participative decision making approach may be more appropriate to establish common interests and produce agreement as to what should be done and how. The Kettl and Fesler conclusion that no single approach offers a best solution to all the problems of making decisions captures the central theme to the USAWC perspective on decision making.<sup>32</sup> Having a variety of decision tools in our kitbags helps us identify the appropriate approach to individual problem sets.

## ENDNOTES

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<sup>1</sup> Ronald Heifetz, *Leadership without Easy Answers* (Cambridge, MA: Belknap Press, 1994), 23-26.

<sup>2</sup> Stephen J. Gerras (ed.), *Strategic Leadership Primer* (Carlisle, PA: U.S. Army War College, 2010), 2.

<sup>3</sup> This figure is included in a slide presentation found at <http://www.dtic.mil/doctrine/jrm/plan4.ppt>. The concept of Joint Planning and Execution is detailed in “Chapter I Principles and Concepts” *Joint Publication 5-0 Joint Operation Planning*. (Washington, DC: Joint Chiefs of Staff, December 2006) Figure I-3 provides an illustration of the Joint Planning and Execution Community.

<sup>4</sup> Herbert A. Simon, *Models of Man* (New York: John Wiley and Sons, 1957).

<sup>5</sup> Ibid., 240-242

<sup>6</sup> Kettl and Fesler, p. 238-240.

<sup>7</sup> Graham T. Allison, *Essence of Decision: Explaining the Cuban Missile Crisis* (Boston: Little, Brown, 1971).

<sup>8</sup> Ibid., 242.

<sup>9</sup> Ibid., 244.

<sup>10</sup> Craig College and William Tarantino, Leading Change within the Army BRAC 2005 Process. Paper presented at Defense Analysis Seminar (Seoul Korea, April 2006), 8.

<sup>11</sup> Kettl and Fesler, p. 247.

<sup>12</sup> Charles Lindblom, “The Science of Muddling Through,” *Public Administration Review* (Spring, 1957): 79-88.

<sup>13</sup> Heifetz.

<sup>14</sup> For an amusing treatment of the evolution of the Bradley Fighting Vehicle from an infantry troop transport to an imposing combat system see the HBO film, “The Pentagon Wars” 1998 directed by Richard Benjamin.

<sup>15</sup> Yehezkel Dror, “Muddling Through—‘Science’ or Inertia?” *Public Administration Review* (1964): 153-177.

<sup>16</sup> Michael Howlett and M. Ramesh, *Studying Public Policy: Policy Cycles and Policy Subsystems*, 2nd edition (Ontario: Oxford University Press, 2003), 238.

<sup>17</sup> F.R. Baumgartner and B. D. Jones, *Agendas and Instability in American Politics* (Chicago: The University of Chicago Press, 1993).

<sup>18</sup> N. Eldredge and S. J. Gould, “Punctuated Equilibria: An Alternative to Phyletic Gradualism” in Schopf, T. M. (ed.), *Models in Palaeobiology* (n.p.: Freeman Cooper, 1972), 82-115.

<sup>19</sup> James L. True, Bryan D. Jones, and Frank R. Baumgartner, “Explaining Stability and Change in American Policymaking,” in *Theories of the Policy Process* ed. by Paul Sabatier (n.p.: 1999), 98.

<sup>20</sup> Admiral Robert L.J. Long, et. al., Report of the DoD Commission on Beirut International Airport Terrorist Act (n.p.: 1983). [<http://www.ibiblio.org/hyperwar/AMH/XX/MidEast/Lebanon-1982-1984/DOD-Report/index.html>] (accessed 5 July 2012) The report, widely praised for being tough and direct, made several observations that contributed to the catastrophic loss of U.S. Servicemen. The commission concluded that the Department of Defense was inadequately prepared to deal with terrorism, a lack of focused intelligence in support of the mission (particularly Human Intelligence (HUMINT)), inadequate handling of the identification and evacuation of casualties, and an ambiguous chain of command and rules of engagement. The report strongly suggests failures in command and coordination across the U.S. Armed Forces were the proximate cause of the incident. Consequently, the tremendous loss of lives in the U.S. Marine contingent assigned to the multi-national force--tasked to provide support to the Lebanese government in establishing its sovereignty over the Beirut area and to facilitate the withdrawal of foreign military forces in Lebanon—led to the catastrophic loss of life so painfully remembered on the anniversary of that fateful day.

<sup>21</sup> Ibid., 17-19.

<sup>22</sup> Deborah Stone, *Policy Paradox: The Art of Political Decisionmaking* (New York: W.W. Norton & Co, Inc., 2002).

<sup>23</sup> Ibid.

<sup>24</sup> H. R. McMaster, *Dereliction of Duty: Lyndon Johnson, Robert McNamara, the Joint Chiefs of Staff, and the Lies that Led to Vietnam* (New York: HarperCollins, 1998).

<sup>25</sup> Michael Cohen, James March and Johan Olsen, “The Garbage Can Model of Organizational Choice,” *Administrative Science Quarterly* 17(1) (1972): 1-25.

<sup>26</sup> Joseph Metcalf, “Decisionmaking and the Grenada Rescue Operation” in J. G. March and R. Weissinger-Baylon eds *Ambiguity and Command; Organizational Perspectives on Military Decisionmaking* (Marshfield, Massachusetts: Pitman Publishing, 1986), 277-297.

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<sup>27</sup> Ibid., 277.

<sup>28</sup> Nikolaos Zahariadis, "Ambiguity, Time, and Multiple Streams" in *Theories of the Policy Process*, ed. by Paul Sabatier (n.p.: 1999), 74-5.

<sup>29</sup> Donald F. Kettl, "Gauging the Stress Test" in *System under Stress: Homeland Security and American Politics*, 2d ed. (Washington, DC: Congressional Quarterly Press, 2007), 123-143.

<sup>30</sup> List of CNN articles on foiled terrorist plots in 2000 accessed via Google and found at <http://articles.cnn.com/keyword/ahmed-ressam> (accessed 25 July 2012).

<sup>31</sup> Elizabeth C. Borja, "Brief Documentary History of the Department of Homeland Security" found at [http://www.dhs.gov/xlibrary/assets/brief\\_documentary\\_history\\_of\\_dhs\\_2001\\_2008.pdf](http://www.dhs.gov/xlibrary/assets/brief_documentary_history_of_dhs_2001_2008.pdf) (accessed 13 December 2011), pp. 4-5.

<sup>32</sup> Ibid., 251.